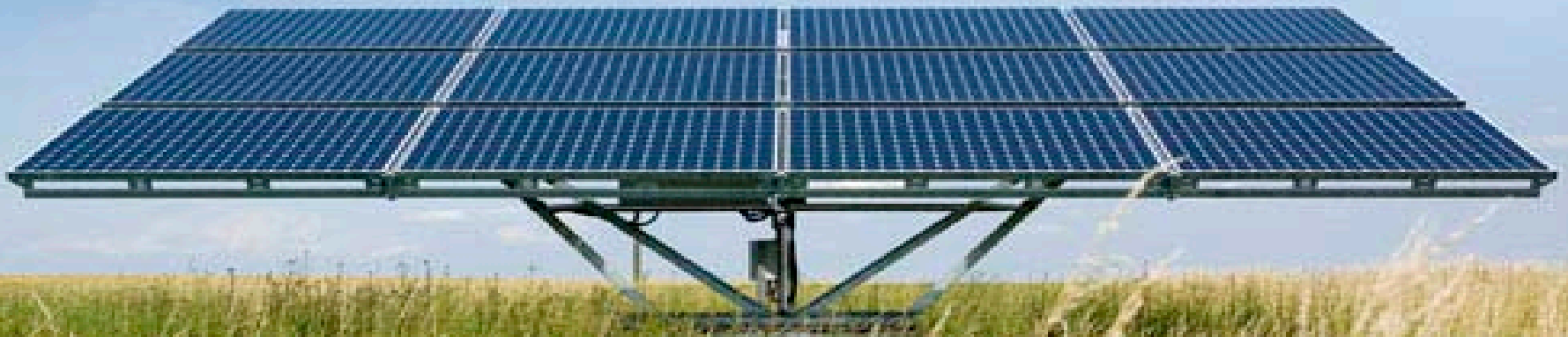


The Beyond Coal Campaign In Texas





General Outline

- (1) the nature of the campaign – background, objectives;
- (2) what financial research was conducted, how it was produced and disseminated;
- (3) what were the targets of the financial information;
- (4) how the financial information and analysis was used in the campaign – media, educating opinion leaders, leadership or team building, fundraising; and
- (5) what worked and what would you do differently in the future.



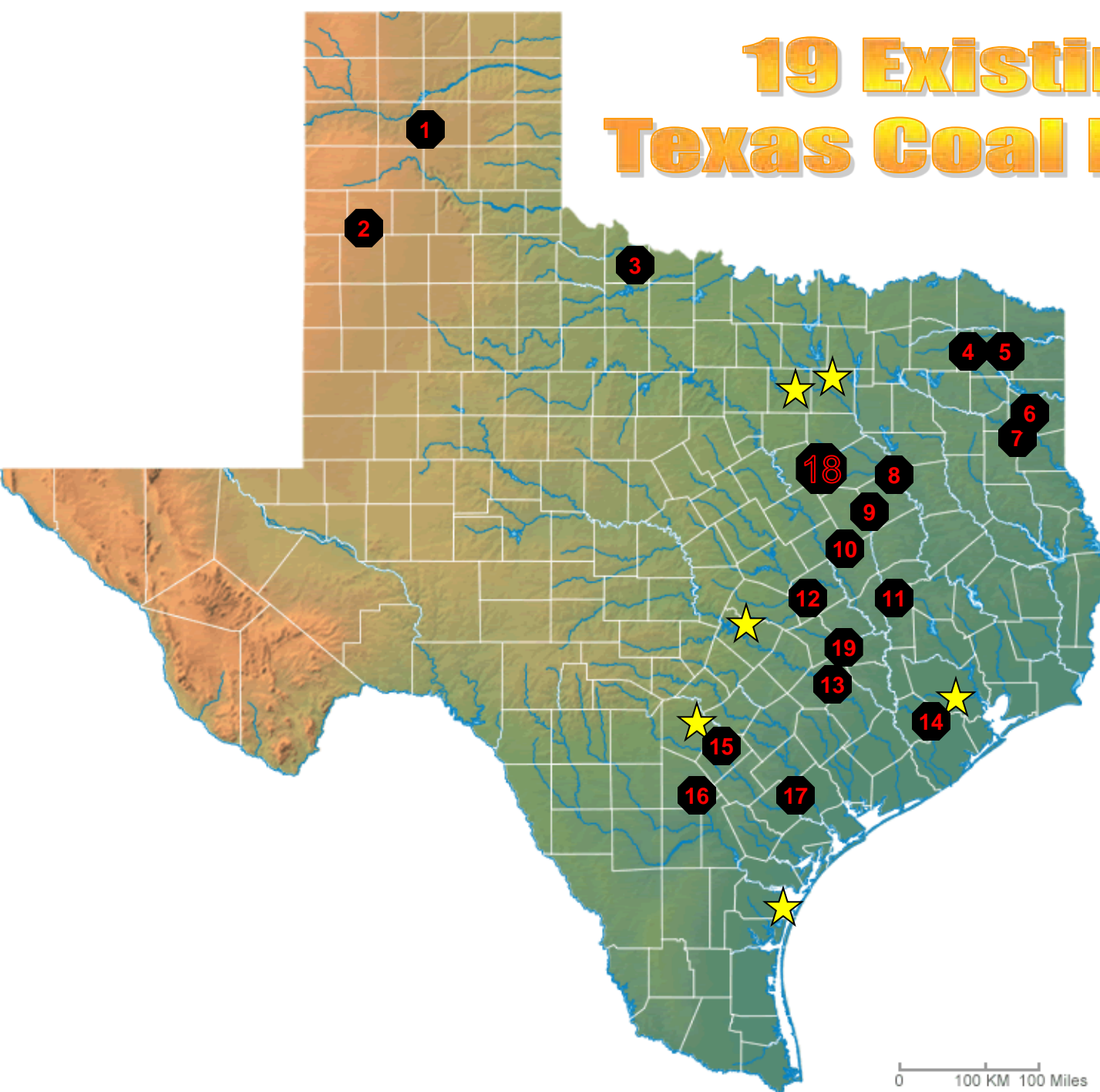
Texas by the Numbers

Are we making progress? You decide.

	Texas Rank	Texas Rank
	2000	2009
NOx emissions	1	1
SO2 emissions	5	3
CO2 emissions	1	1
VOC* emissions	1	1
Particulate emissions (PM10)	2	1
Emissions of toxic chemicals	1	4
Mercury emissions	1	1

*** Volatile organic compounds**

19 Existing Texas Coal Plants



1. Harrington
2. Tolk
3. Oklaunion
4. Monticello
5. Welsh
6. Pirkey
7. Martin Lake
8. Big Brown
9. Limestone
10. Twin Oaks
11. Gibbons Creek
12. Sandow
13. Fayetteville
14. Parish
15. Deely Spruce
16. San Miguel
17. Coletto Creek
18. Oak Grove
19. Sandy Creek



Compared to 2,000 Facilities

Big Three criteria emissions are 25.52% of TX's total emissions

Statewide comparison of Luminant to ~2,000 Texas Industrial Plants:

1. 185,665 tons total Luminant's Big Three SO₂ (33.8%)
2. 33,449 tons total Luminant's Big Three NO_x (10.0%)
3. 126,825 tons total Luminant's Big Three CO (37.6%)
4. 732 tons total Luminant's Big Three VOCs (0.007%)
5. 6,150 tons total Luminant's Big Three PM₁₀ (11.4%)
6. 393 pounds total Luminant's Big Three Lead (0.01%)

7. Total: 352,822 tons



Luminant's Pollution

How Dirty are Luminant's Big Three Coal Plants in Texas?

Statewide comparison of Luminant to 19 Texas Coal Plants:

1. 447,654 tons total Texas coal plant SO₂ (Luminant = 41.5%)
2. 109,386 tons total Texas coal plant NO_x (Luminant = 30.6%)
3. 176,915 tons total Texas coal plant CO (Luminant = 71.7%)
4. 2,106 tons total Texas coal plant VOCs (Luminant = 34.8%)
5. 17,073 tons total Texas coal plant PM₁₀ (Luminant = 36.0%)
6. 3.12 tons total Texas coal plant Lead (Luminant = 6.3%)
7. **Total: 753,136 tons total Texas coal plant criteria emissions (46.85% of Tx)**



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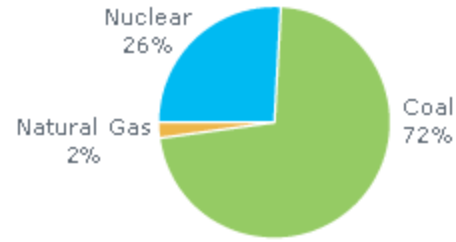
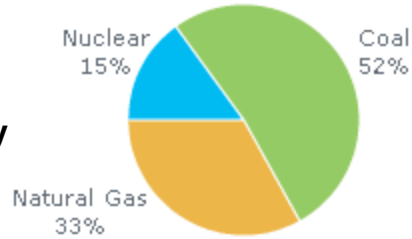
ERCOT Region Map





Who is Luminant?

Generation Summary

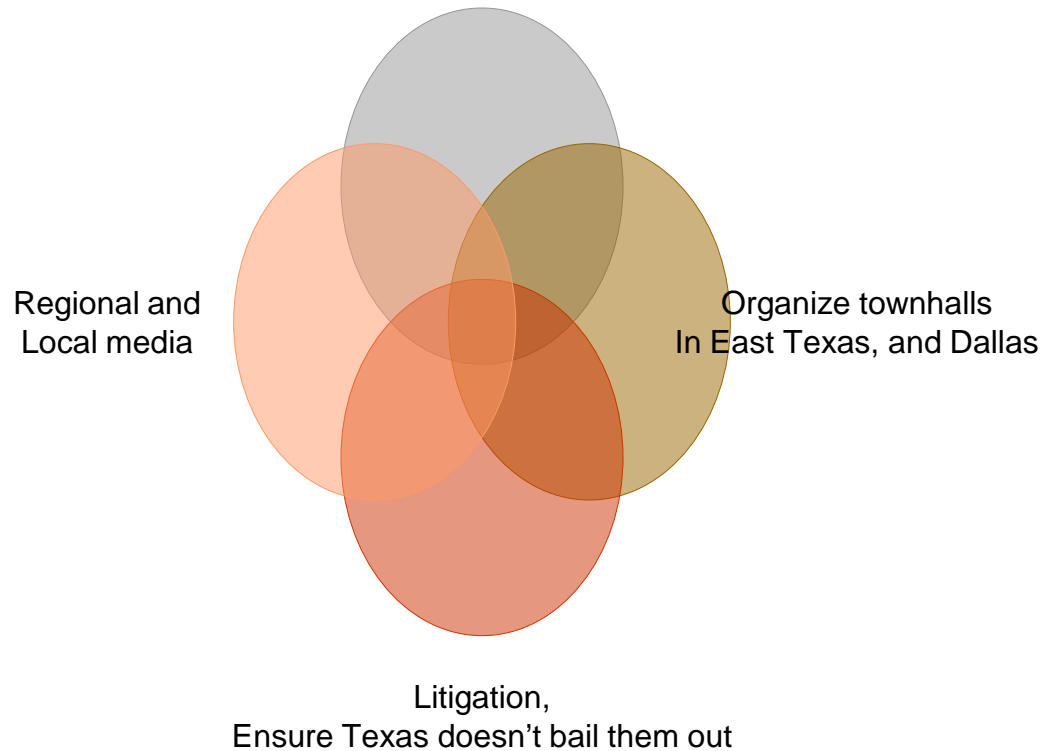


FUEL TYPE	CAPACITY (MW)	NUMBER OF PLANTS	NUMBER OF UNITS
Nuclear	2,300	1	2
Coal	8,017	5	12
Natural gas	5,110	8	26
TOTAL	15,427	14	40



Luminant's falling

Big Brown is the target, but Monti 1 and 2 announced idle with CSAPR
Support EPA to do the work



Framework: Federal rules force Luminant to invest in pollution control and they're near bankrupt

Narrative: Luminant is the worst polluter in Texas; Luminant has broken its promise to clean up; Luminant wants special treatment



The Rules Are Doing A Lot Of Work For Us

Coal will soon abide by air quality regulations that, for the most part, the rest of industrial America complies with already.

- Cross State Air Pollution Rule (“CASPER” for SO₂, NO_x ozone) (2011 (final) – stayed but this is what prompted Luminant to announce idling of 2 units (1200 MW); unfortunately, now also put on hold)
- Air Toxics/EGU MACT (Acid Gases, Mercury, Dioxin, etc) (2014 compliance)
- Haze FIP May 2015 (Luminant and Fayette subject to this); partial FIP says comply with CSAPR – very unclear what this means for Texas
- 1 hour NO_x/SO₂ National Ambient Air Quality Standards (2010 (final) – NO_x 2021/22 compliance; SO₂ compliance 2017 (SIPS due 2013/14)) We’ve already modeled exceedences
- Water Pollution / Water Use

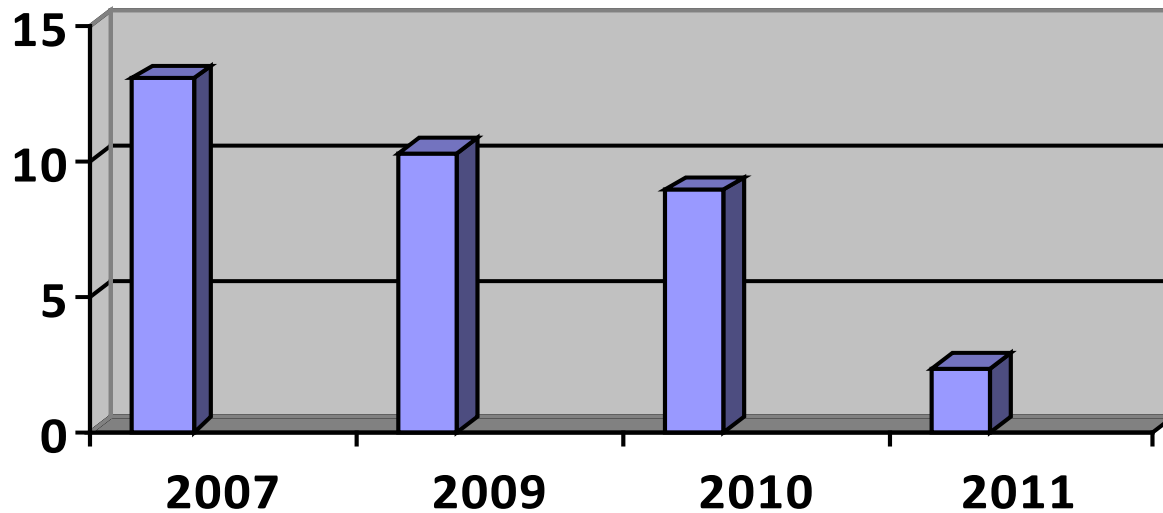


What Costs Would Be Incurred?

\$3.6 billion

Plant	FGD Scrubber SO2	Activated Carbon Injection Mercury	ESP Particulates Mercury	SNCR NOx	SCR NOx	Baghouse Mercury
Martin Lake 1	X	X	X			
Martin Lake 2	X	X	X			
Martin Lake 3	X	X	X			
Monticello 1		X	X	X		
Monticello 2		X	X	X		X
Monticello 3	X	X	X	X		X
Big Brown		X	X	X		X
Big Brown		X	X	X		X

Chart 2: Big Brown, Martin Lake and Monticello Coal Plant Values (\$ billions)



What do we different for 2013?

We're more aggressive;

We get another financial report out earlier
and push it with a wider range of electeds;

We work with the unions on a just transition;

We retire 2400 MW of dirty old coal by 2016.



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